

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07H21/00 C07H19/16 C07H19/06 C07H19/10 C07H19/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE CHEMABS 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; DE VROOM, E. ET AL: "Preparation of internucleotide phosphate analogs via the corresponding hydrogen-phosphonate diester" XP002290353 retrieved from STN Database accession no. 110:173673 abstract & RECUEIL DES TRAVAUX CHIMIQUES DES PAYS-BAS, 107(10), 592-4 CODEN: RTCPA3; ISSN: 0165-0513, 1988,</p> <p style="text-align: center;">----- -/-</p>	1-3, 10, 18-23

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

29 July 2004

Date of mailing of the international search report

13/08/2004

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INTERNATIONAL SEARCH REPORT

International Application No

/GB2004/001196

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>EVANS, DAVID A. ET AL: "New silicon-phosphorus reagents in organic synthesis. Carbonyl and conjugate addition reactions of silicon phosphite esters and related systems" JOURNAL OF THE AMERICAN CHEMICAL SOCIETY , 100(11), 3467-77 CODEN: JACSAT; ISSN: 0002-7863, 1978, XP002290351 page 3468; compounds 15, 17</p>	16,17
A	<p>SEELA F ET AL: "DIASTEREOMERICALLY PURE R-P AND S-P DINUCLEOSIDE H PHOSPHONATES THE STEREOCHEMICAL COURSE OF THEIR CONVERSION INTO P METHYLPHOSPHONATES PHOSPHOROTHIOATES AND OXYGEN-18-LABELLED CHIRAL PHOSPHATES" JOURNAL OF ORGANIC CHEMISTRY, vol. 56, no. 12, 1991, pages 3861-3869, XP002290352 ISSN: 0022-3263 cited in the application Scheme III page 3865</p>	4-15
A	<p>BRILL W K-D: "Thioalkylation of Nucleoside-H-phosphonates and its Application to Solid Phase Synthesis of Oligonucleotides" TETRAHEDRON LETTERS, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 36, no. 5, 30 January 1995 (1995-01-30), pages 703-706, XP004028873 ISSN: 0040-4039 cited in the application page 704; figure 1</p>	4-15
A	<p>WO 98/11120 A (UNIV DUKE) 19 March 1998 (1998-03-19) claim 3; figure 12</p>	4-15
A	<p>WO 95/32980 A (ISIS PHARMACEUTICALS INC ; RAVIKUMAR VASULINGA (US); COLE DOUGLAS L (U) 7 December 1995 (1995-12-07) claims</p>	4-15

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

/GB2004/001196

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9811120	A	19-03-1998	US 5859231 A	12-01-1999
			AU 4326797 A	02-04-1998
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